

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/07684

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ G06F3/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G06F3/12

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2002-140302 A (Naoki HORI),	46, 47
Y	17 May, 2002 (17.05.02),	1-5, 11-17,
	Full text; all drawings	22-25, 28,
	(Family: none)	34-36, 39, 49,
		50, 53-55
A		6-10, 18-21,
		26, 27,
		29-33, 37, 38,
		40-45, 48, 51,
		52, 56, 57
Y	JP 2001-142665 A (SEIKO EPSON CORP.),	1-5, 11-17,
	25 May, 2001 (25.05.01),	22-25, 28,
	Abstract	34-36, 39, 49,
	(Family: none)	50, 53-55



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search
08 September, 2003 (08.09.03)Date of mailing of the international search report
16 September, 2003 (16.09.03)Name and mailing address of the ISA/
Japanese Patent Office

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Telephone No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2001-331660 A (SEIKO EPSON CORP.), 30 November, 2001 (30.11.01), Full text; all drawings (Family: none)	1-5, 11-17, 22-25, 28, 34-36, 39, 49, 50, 53-55
Y	EP 999494 A2 (SEIKO EPSON CORP.), 10 May, 2000 (10.05.00), Full text; all drawings & JP 2000-227890 A	1-5, 11-17, 22-25, 28, 34-36, 39, 49, 50, 53
A	JP 2001-75752 A (Casio Computer Co., Ltd.), 23 March, 2001 (23.03.01), (Family: none)	1-5, 11-17, 22-25, 28, 34-36, 39, 49, 50, 53
A	WO 97/13341 A1 (INTERNATIONAL SERIES RESEARCH, INC.), 10 April, 1997 (10.04.97), & JP 11-512860 A & US 5757916 A1	7-10, 18-21, 29-33, 40-45, 48, 51, 52, 56, 57